

October 1, 2020

ELECTRONICALLY FILED VIA ECFS

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington DC 20554

Re: ET Docket No. 19-138
Ex Parte Notice

Dear Ms. Dortch:

On October 1, 2020, on behalf of Continental Automotive Systems, the undersigned from Arent Fox LLP had a telephonic meeting with Erin McGrath, Commissioner O’Rielly’s Legal Advisor for wireless, public safety, and international issues. At the meeting, we discussed the information in Continental’s August 31, 2020 ex parte filing, which is attached hereto.

I also mentioned during the meeting that the country of Brazil has now announced that it is also allocating 75 MHz of spectrum in the 5.9 GHz band for ITS, joining a large number of countries that have allocated substantially more than 30 MHz for ITS in the 5.9 GHz band. Therefore, the U.S. will fall far behind another major country if the Commission shrinks the allocation to ITS in the 5.9 GHz band to 30 MHz.

More specifically, what this will mean is that people in Brazil, Canada, the European Union, and other places will be saved from needless deaths in the near future through advanced ITS applications like CPM and MCM applications for which there will be sufficient bandwidth to deploy. If the Commission continues to go down the route it is considering, Americans will suffer a much different fate.

/s/ Alan G. Fishel

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Courtesy copy (via email) to Erin McGrath

August 31, 2020

ELECTRONICALLY FILED VIA ECFS

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington DC 20554

Re: ET Docket No. 19-138
Ex Parte Notice

Dear Ms. Dortch:

On August 27, 2020, Kirby Howard, Diane Esch, Bettina Erdem, Marc Menzel, Bob D’Avello, and Robert Gee, from Continental, and the undersigned from Arent Fox LLP, had a phone call with the following Commission personnel: Jamie Coleman, Aspasia Paroutsas, Monisha Ghosh, Howard Griboff, Ira Keltz, Patrick Forster, and Rodney Small.

We discussed the following four points during the call:

1. CPM and MCM safety-of-life applications show the clear need for V2X to retain the 75 MHz in the 5.9 GHz band.

The automotive industry needs to retain the 75 MHz in the 5.9 GHz band for V2X use. If only 30 MHz is retained, Collective Perception Messages (“CPM”) safety-of-life applications and Maneuver Coordination Messages (“MCM”) safety-of-life applications will be impossible in the U.S. They require at least 20 MHz of spectrum each. This is in addition to the requirements of BSM applications, V2I applications¹ and platooning. If the lower 45 MHz is pulled from V2X, the math simply won’t work, and countless lives will be lost because CPM applications and MCM applications will not be available in the U.S. Continental also referenced during the call its July 10 ex parte filing that describes in considerable detail the spectrum needs for CPM and MCM applications.

Numerous commenters over the past several months have also emphasized the importance of CPM and MCM applications and the inability for these applications to be deployed in the U.S. if the lower 45 MHz is pulled away from V2X in this proceeding. These commenters include the Intelligent Transportation Society of America, Alliance for Auto Innovation, Volkswagen Group of America, Toyota Motor North America, American Honda Motor Co., Safer Motorcycling Research Consortium, and CAR 2 CAR Communication Consortium.²

In stark contrast, the unlicensed spectrum community has been almost completely silent on this issue, constantly urging the Commission to release an order in its favor as soon as possible, presumably hoping that it can prevail without ever having to address the simple fact that CPM and MCM applications will be unavailable in the U.S. if the lower 45 MHz is pulled from V2X. In fact, the only member of the unlicensed spectrum community to even seek to directly address this issue in its

¹ SPAT signal phase and timing, MAP road/lane topology, IVI in-vehicle-information, RSA Road Side Alert.

² Ex parte filings, ET Docket No. 19-138, Intelligent Transportation Society of America (August 14, 2020), Alliance for Auto Innovation (August 11, 2020), Volkswagen Group of America (June 18, 2020), Toyota Motor North America (June 12, 2020), American Honda Motor Co. (June 8, 2020), Safer Motorcycling Research Consortium (June 9, 2020), and CAR 2 CAR Communication Consortium (June 4, 2020).

ex parte filings made an argument that was not just unpersuasive – it was frivolous. There is simply no truth to what the Wireless Internet Service Provider Association (WISPA) claimed. WISPA argued that the “request to keep all 75 megahertz available for future vehicular use is at best highly speculative. It presupposes widespread adoption of autonomous vehicles that exchange video with one another, not only among adjacent vehicles, and the use of artificial intelligence to use this to guide the vehicles.”³ As Continental discussed in the meeting, the need for CPM and MCM applications exists completely outside of the adoption of autonomous vehicles and neither CPM nor MCM applications involve the exchange of video between vehicles.

2. CPM and MCM applications will be available in the near future if the 45 MHz is not pulled from V2X in this proceeding

The standards for CPM applications will be finalized shortly, and the standards for MCM applications will be finalized soon thereafter. CPM applications are already in product development, and deployment of these life-saving applications can, and we expect will, be launched by 2024-2025 if the Commission does not prevent that from occurring as a result of its decision in this proceeding (as discussed in the prior section, if the Commission takes 45 MHz away from V2X, there will not be sufficient spectrum for CPM and MCM applications here).

While the unlicensed spectrum community continues to seek to imply that these critical auto safety technologies will be worthless until nearly all vehicles have them, that is simply false. As soon as a small percentage of vehicles and infrastructure have the applications, lives will be saved, and the number of lives saved will just keep growing larger and larger over time as more and more vehicles and infrastructure include them and the public becomes more and more aware that these technologies provide extraordinary safety benefits. To understand how misplaced the unlicensed spectrum community’s argument on this is, think about an analogy. If an entity came into the FDA and proved they had a therapeutic that would initially cure a small percentage of cancers and eventually cure virtually all of them, would the FDA show them the door and say come back when the therapeutic cures virtually all cancers because curing just some is not helpful? Of course not. The Commission should look at this analogous situation in the same way. Any other view dehumanizes and shortchanges the value of human life.

3. Just a few months ago, the unlicensed spectrum community acknowledged that the outcome of the very recent 6 GHz proceeding was, among other things, “historic”, “the single most consequential FCC decision in at least a generation”, and will “enable gigabit-fast WiFi in every home, school, and enterprise”.

A recurring theme Continental has heard is the following: Okay, CPM and MCM applications will save countless lives if used in the U.S. but the Commission needs to do a cost-benefit analysis to see if the detriment of failing to prevent countless lost lives from preventable auto accidents is at least as great as the detriment of not giving this 45 MHz to the unlicensed spectrum community. The answer to that question is resoundingly yes. And don’t take our word for it. Look at what the unlicensed spectrum industry itself stated about the 6 GHz decision rendered just a few months ago. They said the following, among other things, about that decision (see attached document for an even more robust set of quotes from their statements):

- Is the single most consequential FCC decision in at least a generation
- Is a historic and visionary decision that will transform wireless connectivity for decades to come
- Is a watershed moment for connectivity and innovation

³ Wireless Internet Services Provider Association, ET Docket No. 19-138, July 24, 2020, p. 3.

- Is a game-changer for Global Wi-Fi
- Will enable gigabit-fast Wi-Fi in every home, school, and enterprise
- Ensures that WiFi users can stay connected to colleagues and family, and to healthcare, business, education, and other critical services
- Will make available the full potential of broadband and Wi-Fi as critical tools for all Americans
- Open[s] the flood gates of WiFi benefits for American consumers, enterprises and the economy
- Provides the rocket fuel to truly enrich and realize the dreams of rural 5G
- Positions the U.S. to lead the world in next-generation 5G services.⁴

When you read the above bullet points, plus the attached document, it is hard to reach any conclusion other than this one: the unlicensed spectrum industry does not desperately need this 45 MHz as well, and certainly shouldn't receive it at the expense of the auto industry, and more importantly, at the expense of the American public, many of whom will needlessly die in preventable auto accidents if the spectrum is taken away from V2X so that CPM and MCM applications are not implemented here.

4. The U.S. will fall behind internationally if V2X is left with only 30 MHz.

There is nothing subjective about what is happening in other countries in this band; it is all very much objective. Yet, in this proceeding, the unlicensed spectrum community keeps commenting on this issue by making statements that are untrue. For example, Open Technology Institute at New America ("OTI") stated in July in an ex parte filing to the Commission that "Globally, 30 MHz is understood to be sufficient for critical auto safety services" and "EU Regulators concluded that 30 MHz is all that is required for real-time auto safety operations..."⁵ Those statements are just false. Many countries have allocated more than 30 MHz for V2X, and less than a year ago the International Telecommunications Union at its World Radio Conference issued a recommendation that 75 MHz should be allocated for V2X.⁶ One thing is for certain – it didn't do this because only 30 MHz was needed for safety. The fact of the matter is that more and more countries are increasing their spectrum allocations for V2X; only the U.S. is even considering shrinking it. And as for the EU, it has already allocated 50 MHz for auto safety (with 20 MHz of that 50 MHz also available for non-safety) and will be announcing very soon (likely in the next several weeks) that it is allocating another 20 MHz for auto safety. 50 MHz plus 20 MHz does not, contrary to what OTI suggests, equal 30 MHz. It equals 70 MHz.

/s/ Alan G. Fishel

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⁴ Federal Communications Commission document (What they are Saying about Chairman Pai's Proposal to Allow Unlicensed Use of the 6 GHz Band). <https://docs.fcc.gov/public/attachments/DOC-363919A1.pdf>; Reactions to FCC Opening Up 6 GHz Band to Wi-Fi and Other Unlicensed Uses. <https://www.benton.org/headlines/reactions-fcc-opening-6ghz-band-wi-fi-and-other-unlicensed-uses>.

⁵ Open Technology Institute at New America, ex parte filing, ET Docket No. 19-138, July 14, 2020, Attachment entitled the *5.9 GHz Band: Removing the Roadblock to Gigabit Wi-Fi*, pp. 5, 11.

⁶ World Radio Conference 2019 (WRC 19) in WRC Recommendation 208 in conjunction with ITS ITU-R recommendation M.2121-0

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Attachment

Statements made around the time of the Federal Communication Commission's 6 GHz Order

Reactions to FCC Opening Up 6 GHz Band to Wi-Fi and Other Unlicensed Uses.

<https://www.benton.org/headlines/reactions-fcc-opening-6ghz-band-wi-fi-and-other-unlicensed-uses>. (emphasis added)

Michael Calabrese, director of the Wireless Future Project at New America's Open Technology Institute: "**The FCC's unanimous vote to open the entire 6 GHz band for unlicensed sharing will enable gigabit-fast WiFi in every home, school, and enterprise.** Access to this band of frequencies will accelerate the availability and affordability of next-generation internet applications and services nationwide."

WiFi Alliance: "Today, the Federal Communications Commission (FCC) **made a historic and visionary decision that will transform wireless connectivity for decades to come.** By making 1200 megahertz of spectrum in 6 GHz available for unlicensed innovation, **the Commission opened the flood gates of WiFi benefits for American consumers, enterprises and the economy.** Most importantly, the FCC decision **ensures** that WiFi users can stay connected to colleagues and family, and to healthcare, business, education, and other critical services."

Federal Communications Commission document (What they are Saying about Chairman Pai's Proposal to Allow Unlicensed Use of the 6 GHz Band).

<https://docs.fcc.gov/public/attachments/DOC-363919A1.pdf> (emphasis added)

Amazon: "Under the leadership of Chairman Ajit Pai, the **FCC has made a bold move** to expand wireless connectivity by proposing to make the entire 6 GHz band available for unlicensed use. **Making this band – all 1200 megahertz – available for unlicensed use is the most significant allocation of unlicensed spectrum to occur in years.** ... The FCC has taken several steps in recent weeks to ensure Americans remain connected during this public health crisis. We commend Chairman Pai and the FCC for taking steps to expand access to unlicensed spectrum moving forward and ultimately paving the way to a more innovative future. **It is what businesses need to operate and what American consumers deserve.**" (Op-ed, 4/21/2020)

Apple: "We applaud the FCC's decision to open up the 6 GHz band for Wi-Fi and other uses. **It sets the course for the next generation of Wi-Fi networks** and will help us to create innovative, new product experiences for our customers." (Statement, 4/1/2020)

Aruba Networks: "**This new Order ... is the single most consequential FCC decision in at least a generation** and in some ways eclipses the original 1997 decision. In addition to touching ordinary Americans in a very practical way very soon, **its effects will be felt worldwide for decades to come.** ... The FCC's leadership both eases the way for and places pressure on every other country to follow in its path. ... The United States has served notice to

the world that to allocate less spectrum to unlicensed is ultimately to be at a competitive disadvantage. Welcome to the ‘space age’ of Wi-Fi.” (Blog, 4/10/20)

Boingo: “The expansion of Wi-Fi into the 6 GHz band provides exciting new real estate that lays the foundation for continued wireless innovation. **The significant swath of contiguous spectrum is well suited to facilitate Wi-Fi’s skyrocketing growth**, and will enable Boingo to maximize the benefits of neutral host Wi-Fi 6 deployments at major airports, stadiums, military bases and multifamily communities.” (Statement, 4/1/2020)

Broadcom: “Today’s announcement by Chairman Ajit Pai that the Commission will vote to open 1,200 MHz of unlicensed spectrum in the 6 GHz band **positions the U.S. to lead the world in next-generation 5G services. All Americans could soon have Wi-Fi in a pristine, wireless superhighway to deliver digitally immersive experiences including in education and telemedicine.** ... We commend Chairman Ajit Pai and his colleagues for their elegant vision for expanding the use of this critical band to include unlicensed technologies **and are excited for the opportunities this presents to shape the next 20 years of our connected world.**” (Blog, 4/1/2020)

CableLabs: “CableLabs strongly supports the Chairman’s proposal to unleash the next generation of Wi-Fi innovation by making the 6 GHz band available for unlicensed technologies. **This proposal will help to ensure that Wi-Fi connectivity keeps pace with the cable industry’s 10G broadband platform.** Broadband and Wi-Fi have become even more integral in daily life as Americans have shifted to a new reality of remote work, learning, and health services. Fully enabling the 6 GHz band for these services into the future is an important step for the Commission to take at this time.” (Statement, 4/1/2020)

Connect Americans Now: “Connect Americans Now commends Chairman Pai and the FCC for their continued dedication to maximizing spectrum resources for broadband use, including Wi-Fi. **Expanding the availability of unlicensed spectrum in the 6 GHz band for high-bandwidth connectivity will make available the full potential of broadband and Wi-Fi as critical tools for all Americans.**” (Statement, 4/1/2020)

Consumer Action for a Strong Economy: “The proposal would ensure the spectrum’s current license users could keep their frequencies, while letting unlicensed users fill in the unused gaps between them. **By freeing the space for widespread use, the FCC is opening the door to the kind of investment and innovation that will bring 5G speeds to every home and business in the country.**” (Op-ed, 4/9/2020)

Discovery Institute: “**In what would amount to a five-fold increase in the amount of electromagnetic spectrum available for WiFi and other uses, Chairman Ajit Pai of the Federal Communications Commission is boldly and brilliantly proposing to unleash the entire 6 gigahertz band for shared, unlicensed use.** ... It’s been 17 years since the commission allocated the 5 GHz band for WiFi, and Chairman Pai is to be commended for acting decisively to supplement that now.” (Blog, 4/20/20)

Dynamic Spectrum Alliance: **“The addition of 1200 MHz of spectrum for unlicensed use will be a watershed moment for connectivity and innovation. The Chairman’s proposal to enable multiple categories of unlicensed 6 GHz equipment – low power indoor, very low power portable, and standard power devices – will benefit American consumers through innovative services and provide manufacturers the flexibility to design their products in the most cost effective manner.”** (Statement, 4/1/2020)

Facebook: **“Huge announcement from @AjitPaiFCC on the plan to make 1200 MHz of new spectrum available across 6GHz for #WiFi. This is clearly one the most important wireless announcements in a long time and will redefine the way we understand and use #WiFi and it will be a booster for AR\VR.”** (Tweet, 4/1/2020)

Libertas Institute: **“@FCC proposal would open up the entire 6 GHz band for unlicensed use. The amount of spectrum for Wi-Fi would expand by a factor of 5! @AjitPaiFCC is making sure America is ready for the future of the internet with this proposal.”** (Tweet, 4/1/2020)

New America Foundation’s Open Technology Institute: **“Consumer advocates commend the FCC for its pathbreaking spectrum-sharing order. Opening the entire 6 GHz band for low-power, gigabit-fast Wi-Fi in every home, school, and enterprise will accelerate the availability and affordability of next-generation applications and services nationwide. Even the fastest fiber broadband internet service is useless for consumers without the Wi-Fi spectrum needed to connect all of our laptops, tablets, and smartphones.”** (Statement, 4/1/2020)

WifiForward: **“We applaud Chairman Pai for a game-changing plan to unleash much-needed unlicensed spectrum that will support generational innovation while protecting existing users of the spectrum. From multi-gigabit Wi-Fi capabilities on our home networks to low-cost telemedicine and remote patient monitoring, from VR-based training for mining and other dangerous jobs to remote surgery, this spectrum supports the future of Wi-Fi and other innovations we cannot yet comprehend.”** (Statement, 4/1/2020)

Wi-Fi NOW: **“This visionary, courageous, and unprecedented decision – which arguably will be remembered as the signature achievement of Ajit Pai’s FCC chairmanship – is likely to define the future of connectivity in the US and the world for at least the coming decade if not a generation. The new spectrum will seed the ground for a wireless connectivity revolution and reinforce the immense socio-economic value and universal applicability of Wi-Fi technology. Welcome to a new age in connectivity for all Americans.”** (Blog, 4/1/2020)

Wireless Broadband Association: **“The proposed opening of the 6 GHz band to Wi-Fi 6 technology will be a game changer for global Wi-Fi. This new band would provide more capacity than all the other Wi-Fi bands put together. If approved, it would prove critical for overcrowding on many Wi-Fi networks, especially in light of the volumes of bandwidth hungry corporate traffic recently pushed onto home networks due to COVID-19. ... The proposed release of the 6 GHz band would mean that we can generate multi-gigabit speeds and low-latency connections to deliver advanced mobile services to consumers, business and industry.”** (Statement, April 2, 2020)

Wireless Internet Service Providers Association: **“There has not been a significant release of unlicensed spectrum for two decades, and this new spectrum will provide the rocket fuel to truly enrich and realize the dreams of rural 5G, as well as other wireless innovation yet to be invented. ... The Commission has done some groundbreaking work for all Americans in freeing up this valuable, underutilized resource.”** (Statement, 4/1/2020)